

Sanitary Surveys & Impacts on Maintenance

Wes Rubio, Washoe County Health District
Laticia Lord, Bureau of Safe Drinking Water

Because I'm a Regulator...

- Safe Drinking Water Act of 1974
- 1986 SDWA Amendments
- 1996 SDWA Amendments
- Code of Federal Regulations
- National Primary Drinking Water Regulation (40 CFR Part 141)
- NDPWR Implementation – Primacy
- National Secondary Drinking Water Regulations

Definition

- “an on-site review of the water source (identifying sources of contamination using results of source water assessments where available), facilities, equipment, operation, and maintenance and monitoring compliance of a public water system for the purpose of evaluating the adequacy of such sources, facilities, equipment, operation, and maintenance for producing and distributing safe drinking water.”

What is a “Sanitary Survey”

- Identify deficiencies/defects in a water system
- Infrastructure, design, operation, maintenance, and/or management
- Potential impact to the public and any other consumer
- Forward focus – not just the here and now

Cool Spring



What Do you Expect?????

- Prompt
- Courteous
- Professional
- Knowledgeable
- Prepared
- Have some information

Be Prepared

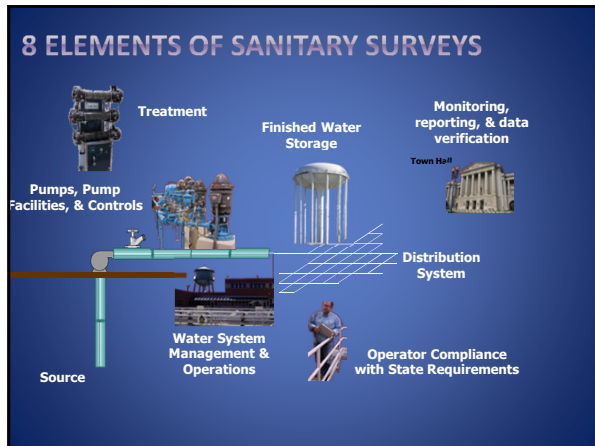
- Your System
- Current contacts
- Well(s)
 - Locations
 - Access
 - Operations
 - equipment

Be Prepared

- Water Storage information
- Access to the entire water system
 - Ex: Have keys to locks, doors, gates, etc...
- Have all the people necessary to complete the inspection

8 – Elements to Sanitary Surveys

- | | |
|-----------------------|--------------------------|
| • Source | • Pumps |
| • Treatment | • Monitoring |
| • Distribution System | • Management |
| • Storage | • Operator Certification |



Deficiencies

- Significant
 - Have the potential to affect human health
- Minor
 - Are a concern but do not have an immediate affect on human health
- Recommendations
 - Do not pose an immediate risk, but if left unaddressed have the potential to become minor and/or significant

How This Affects You

- Observations
 - Findings from the physical inspection
- Results
 - Compilation of physical assessment and the water quality requirements
- Report
 - Provided upon completion of the Sanitary Survey and will provide guidance and/or requirements to meet

Benefits of Sanitary Survey's

- Help the PWS:
 - Strengthen the operational, management, and infrastructure
- Independent review of the PWS
- Allows program staff to work directly with PWS
- Identify barriers and provide mutual education
- Reduces risks to public health

Basic Inspection

- Field inspection
- Water quality data
- Water sampling location
- Current contact information
- Potential hazardous situations
- A complete understanding of the operations

How Long Does This Take?

- It depends....
 - Size of the system
 - Driving
 - Preparation
 - Knowledge
 - Problems
 - Observations
 - Risks to public health

Questions So Far?



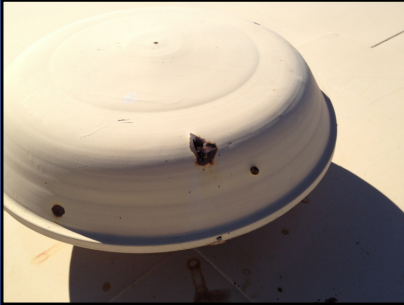
Body found in water tank of Los Angeles hotel is missing tourist

- At about 10:15 a.m., police were called to the Cecil Hotel. The Los Angeles Fire Department also responded. The body was removed at about 4:30 p.m. after an urban search and rescue team worked to free the remains while trying to maintain evidence, authorities on scene said.
- Hotel guests had reported that the water pressure in the building was low, prompting a maintenance worker to visit tanks on the roof, where the body was found, according to Los Angeles Police Department Officer Sara Fayden.

Significant Deficiencies??????



Storage Tank Vent



Flapper Valve – Tank Overflow



Pigeon Poop & Open Well Cap



Well Cap



Oil & Water...



Is Your Water System Safe?









Impact on Maintenance

- Routine maintenance can be compounded by Sanitary Survey results
 - Repairs identified during the survey must be addressed
- This may have huge impacts on maintenance costs

Preparing for a Survey

- Look at previous reports & past deficiencies
- Review past communication
- Sample sites and sample protocols
- Changes to distribution system
- Records available
- Cross connection control plan, emergency response plans, etc...

What Now....

- Water Systems
 - Work with your regulator
 - Establish a time frame
 - An inspection route
 - Split the system in sections
 - One section per year
 - Allows for a more thorough review and easier to schedule and complete

Works for ANY Water System

- Small Systems
 - Have all the same maintenance issues
- Can be more difficult
 - Less Staff
 - Less Funding
- Start with one project at a time
 - Make it impactful!

When Was the Last Time You...

- Inspected your water source(s)?
- Checked the vent line(s)?
- Looked for rodent or other intrusions?
- Climbed your storage tank(s)?
- Looked inside your storage tank(s)?
- Checked the overflow from the storage tank?
- Checked screens?

Set a Routine

- Conduct your own Sanitary Survey
 - Inspect all water sources
 - Annually
- Review TCR Sampling plan
 - Annually and update if needed
- Review Cross-Connection Control Plan
 - Update, maintain, and verify protocols

Set a Routine cont...

- Inspecting the water system
 - Find those pesky rodent homes
 - Raccoons, rats, pigeons, nests, etc...
- Missing and/or non-functioning flapper valves
- Rusted vent screens
- Interior tank coatings
- Cross-connections
- Pump Houses

Talk to your Regulator

- Will all this keep you from having deficiencies
 - Maybe.....
 - Will make your system better, and keep maintenance budgets under control
- Let us know when you make major changes and/or repairs
- Update us when you change your Sample plans, CCC plans, etc...

Contacts

- Wesley Rubio
 - Washoe County Health District
 - 775-328-2381
 - wrubio@washoecounty.us
- Latricia Lord
 - 775-687-9516
 - llord@ndep.nv.gov
